

Cohort 2017 Four-Year Graduation Rates – State Results

The Massachusetts Department of Elementary and Secondary Education (ESE) calculates and reports graduation rates as part of overall efforts to improve educational outcomes for all students.

The 2017 four-year cohort graduation rate is calculated as follows:

$$\frac{\text{\# of students in cohort (denominator) who graduate in 4 years or less}}{[\text{\# of 1st time entering 9th graders in 2013-14}] - \text{transfers out/deaths} + \text{transfers in}}$$

The 2017 four-year cohort graduation rate for Massachusetts public high schools increased by 0.8 percentage points to 88.3 percent from 87.5 percent for the 2016 cohort. This represents the eleventh consecutive year of increase in the four-year rate (see below). All student subgroups showed increased four-year rates as compared to the 2016 cohort. The largest increase among major racial and ethnic groups was shown by the Hispanic and Asian subgroups, which increased by 1.7 and 1.4 percentage points respectively. There are, however, significant gaps in the graduation rates among subgroups. Among the major race and ethnicity subgroup rates, there is a 19.7 percentage point difference between the highest and lowest, belonging to Asian and Hispanic students. This difference is 0.3 percentage points lower than in 2016.

Additional critical findings of the report include:

- The dropout rate for the 2017 cohort was 4.9 percent. This rate remained the same from the 2016 cohort and is still the lowest since the ESE began calculating cohort dropout rates in 2006.
- 5.0 percent of the 2017 cohort is still enrolled in high school.
- The graduation rate for African-American students in the 2017 cohort was 80.0%. This is the first time the graduation rate for the African American subgroup has been at 80% since the ESE began calculating cohort graduation rates.

Table 1. Cohort Graduation Rates 2006-2017

| | 2006 Cohort | 2007 Cohort | 2008 Cohort | 2009 Cohort | 2010 Cohort | 2011 Cohort | 2012 Cohort | 2013 Cohort | 2014 Cohort | 2015 Cohort | 2016 Cohort | 2017 Cohort |
|------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| 4-Yr Rate | 79.9% | 80.9% | 81.2% | 81.5% | 82.1% | 83.4% | 84.7% | 85.0% | 86.1% | 87.3% | 87.5% | 88.3% |
| 5-Yr Rate | 82.7% | 84.0% | 84.2% | 84.0% | 84.7% | 86.3% | 87.5% | 87.7% | 88.5% | 89.4% | 89.8% | N/A |

The following tables and graphs further summarize the results for the 2017 cohort. The results are based on data submitted by school districts through the Department's Student Information Management System.

Table 2. Graduation Results for All Students and Student Subgroups¹

| | | Graduates | | Non-Graduates² | | | | |
|--------------------------|----------------------------|------------------|----------------------|----------------------------------|---------------------------------|-----------|-------------|----------|
| | 2017 Cohort # ¹ | 4-Year Rate | Difference from 2016 | Still in School | Non-Grad Completer ³ | HS Equiv. | Dropped Out | Expelled |
| All Students | 73,249 | 88.3% | +0.8 | 5.0% | 1.2% | 0.7% | 4.9% | 0.0% |
| Female | 36,032 | 90.7% | +0.5 | 3.6% | 1.2% | 0.6% | 3.9% | 0.0% |
| Male | 37,199 | 85.9% | +0.9 | 6.3% | 1.2% | 0.8% | 5.9% | 0.0% |
| ELL ⁴ | 5,662 | 63.4% | -0.7 | 13.3% | 7.2% | 0.3% | 15.8% | 0.0% |
| Eco. Dis. | 32,585 | 79.0% | +0.6 | 8.7% | 2.1% | 1.2% | 8.9% | 0.0% |
| Students w/ Disabilities | 14,049 | 72.8% | +1.0 | 14.6% | 2.9% | 0.9% | 8.8% | 0.0% |
| High Needs ⁵ | 39,279 | 80.0% | +0.9 | 8.6% | 2.1% | 1.1% | 8.2% | 0.0% |
| African American | 6,809 | 80.0% | +1.1 | 9.7% | 3.1% | 0.8% | 6.4% | 0.0% |
| Asian | 4,221 | 94.1% | +1.4 | 3.3% | 0.7% | 0.2% | 1.7% | 0.0% |
| Hispanic | 12,274 | 74.4% | +1.7 | 8.9% | 3.3% | 1.0% | 12.4% | 0.0% |
| Multi-race, Non-Hisp. | 1,702 | 85.2% | +0.9 | 6.2% | 0.9% | 1.5% | 6.2% | 0.1% |
| Native American | 167 | 81.4% | -3.5 | 8.4% | 0.6% | 0.6% | 9.0% | 0.0% |
| Pacific Islander | 69 | 78.3% | -10.8 | 5.8% | 4.3% | 0.0% | 11.6% | 0.0% |
| White | 48,007 | 92.6% | +0.7 | 3.3% | 0.4% | 0.6% | 3.0% | 0.0% |
| Urban | 24,306 | 77.9% | +1.4 | 8.6% | 2.6% | 1.1% | 9.8% | 0.0% |

¹ Due to rounding, row percentages may not equal 100 percent.

² In the reporting of aggregate results, students are included in the first column (from left to right) for which they qualify. For example, students who dropped out or were expelled, but earned a GED, are included in the GED category. Students are only reported in one category.

³ Non-Grad Completer includes 1) students who earned a certificate of attainment, 2) students who met local graduation requirements but the district does not offer certificates of attainment, and 3) students with special needs who reached the maximum age (22) but did not graduate.

⁴ The English language learner, special education, and low income subgroups include all students that were reported in those categories at least once in high school. Students can be counted in more than one group.

⁵ High Needs subgroup includes students categorized as any of the following as of October 1, 2017: 1) Low Income/Economically Disadvantaged, 2) English language learner, 3) Students with disabilities, as well as students categorized as an English language learner during the prior two school years (2014-15 and/or 2015-16).

Table 3. Graduation Results for Race/Ethnicity Groups by Gender

| | | Graduates | | Non-Graduates | | | | |
|----------------------------|------------------|------------------|-------------------------|----------------------|-----------------------|--------------|----------------|----------|
| | 2017 Cohort # | 4-Year Rate | Difference from 2016 | Still in School | Non-Grad Completer | HS Equiv. | Dropped Out | Expelled |
| African American Female | 3,388 | 84.7% | +2.6 | 7.2% | 3.0% | 0.7% | 4.4% | 0.0% |
| African American Male | 3,421 | 75.4% | -0.3 | 12.1% | 3.1% | 0.9% | 8.4% | 0.0% |
| Asian Female | 2,130 | 95.5% | +2.1 | 2.3% | 0.7% | 0.1% | 1.4% | 0.0% |
| Asian Male | 2,088 | 92.8% | +0.8 | 4.2% | 0.7% | 0.4% | 2.0% | 0.0% |
| Hispanic Female | 5,998 | 79.2% | +1.3 | 6.9% | 3.3% | 1.0% | 9.6% | 0.0% |
| Hispanic Male | 6,275 | 69.8% | +1.8 | 10.9% | 3.2% | 1.0% | 15.1% | 0.0% |
| Multi-race Female | 860 | 88.6% | +1.0 | 4.1% | 1.0% | 1.2% | 5.1% | 0.0% |
| Multi-race Male | 842 | 81.7% | +0.9 | 8.4% | 0.7% | 1.8% | 7.2% | 0.1% |
| Native American Female | 88 | 87.5% | -2.2 | 4.5% | 0.0% | 0.0% | 8.0% | 0.0% |
| Native American Male | 79 | 74.7% | +5.9 | 12.7% | 1.3% | 1.3% | 10.1% | 0.0% |
| Pacific Islander Female | 26 | 88.5% | -6.1 | 3.8% | 3.8% | 0.0% | 3.8% | 0.0% |
| Pacific Islander Male | 43 | 72.1% | -9.4 | 7.0% | 4.7% | 0.0% | 16.3% | 0.0% |
| White Female | 23,542 | 94.2% | +0.3 | 2.3% | 0.4% | 0.6% | 2.5% | 0.0% |
| White Male | 24,451 | 91.1% | +1.1 | 4.3% | 0.4% | 0.7% | 3.5% | 0.0% |

Table 4. Graduation Results for Students Receiving Special Education Services by Gender

| | | Graduates | | Non-Graduates | | | | |
|---------------------------------|---------------|-------------|----------------------|-----------------|--------------------|-----------|-------------|----------|
| | 2017 Cohort # | 4-Year Rate | Difference from 2016 | Still in School | Non-Grad Completer | HS Equiv. | Dropped Out | Expelled |
| Students w/ Disabilities Female | 5,170 | 74.8% | +0.2 | 13.0% | 3.1% | 1.0% | 8.1% | 0.0% |
| Students w/ Disabilities Male | 8,873 | 71.7% | +1.6 | 15.5% | 2.8% | 0.9% | 9.1% | 0.0% |

Table 5. Graduation Results for Economically Disadvantaged Students by Gender

| | | Graduates | | Non-Graduates | | | | |
|------------------|---------------|-------------|----------------------|-----------------|--------------------|-----------|-------------|----------|
| | 2017 Cohort # | 4-Year Rate | Difference from 2016 | Still in School | Non-Grad Completer | HS Equiv. | Dropped Out | Expelled |
| Eco. Dis. Female | 15,929 | 82.9% | +0.6 | 6.6% | 2.1% | 1.1% | 7.2% | 0.0% |
| Eco. Dis. Male | 16,650 | 75.3% | +0.6 | 10.8% | 2.2% | 1.2% | 10.5% | 0.0% |

Table 6. Graduation Results for High Needs Students by Gender

| | | Graduates | | Non-Graduates | | | | |
|-------------------|---------------|-------------|----------------------|-----------------|--------------------|-----------|-------------|----------|
| | 2017 Cohort # | 4-Year Rate | Difference from 2016 | Still in School | Non-Grad Completer | HS Equiv. | Dropped Out | Expelled |
| High Needs Female | 18,387 | 83.3% | +0.8 | 6.6% | 2.2% | 1.0% | 6.8% | 0.0% |
| High Needs Male | 20,883 | 77.0% | +0.9 | 10.3% | 2.0% | 1.1% | 9.5% | 0.0% |

Table 7. Graduation Results for English Language Learner Students by Gender

| | | Graduates | | Non-Graduates | | | | |
|----------------------------------|---------------|-------------|----------------------|-----------------|--------------------|-----------|-------------|----------|
| | 2017 Cohort # | 4-Year Rate | Difference from 2016 | Still in School | Non-Grad Completer | HS Equiv. | Dropped Out | Expelled |
| ELL Female | 2,546 | 68.2% | +0.3 | 10.9% | 8.5% | 0.5% | 11.9% | 0.0% |
| ELL Male | 3,116 | 59.5% | -1.3 | 15.3% | 6.1% | 0.2% | 18.9% | 0.0% |
| ELL in Original Cohort | 3,282 | 71.1% | +1.6 | 10.2% | 4.8% | 0.4% | 13.5% | 0.0% |
| ELL Entered Cohort after 10/1/13 | 2,380 | 52.9% | +1.1 | 17.5% | 10.5% | 0.3% | 18.9% | 0.0% |

Table 8. Graduation Results for Race/Ethnicity by English Language Learner Status

| | 2017 Cohort # | Graduates | | Non-Graduates | | | | |
|--------------------------|---------------|-------------|----------------------|-----------------|--------------------|-----------|-------------|----------|
| | | 4-Year Rate | Difference from 2016 | Still in School | Non-Grad Completer | HS Equiv. | Dropped Out | Expelled |
| African American ELL | 1,184 | 69.8% | +0.8 | 12.5% | 10.2% | 0.3% | 7.2% | 0.0% |
| African American Non-ELL | 5,625 | 82.2% | +1.3 | 9.1% | 1.5% | 0.9% | 6.3% | 0.0% |
| Asian ELL | 732 | 84.8% | +5.3 | 8.1% | 2.9% | 0.1% | 4.1% | 0.0% |
| Asian Non-ELL | 3,489 | 96.1% | +0.8 | 2.3% | 0.2% | 0.3% | 1.2% | 0.0% |
| Hispanic ELL | 3,208 | 54.5% | -1.9 | 15.2% | 7.5% | 0.5% | 22.4% | 0.0% |
| Hispanic Non-ELL | 9,066 | 81.9% | +3.3 | 6.7% | 1.7% | 1.2% | 8.9% | 0.0% |
| Multi-race ELL | 36 | 66.7% | -16.6 | 13.9% | 11.1% | 0.0% | 8.3% | 0.0% |
| Multi-race Non-ELL | 1,666 | 85.6% | +1.3 | 6.1% | 0.7% | 1.5% | 6.1% | 0.1% |
| Native American ELL | 4 | | | | | | | |
| Native American Non-ELL | 163 | 82.8% | -2.2 | 8.0% | 0.6% | 0.6% | 8.0% | 0.0% |
| Pacific-Islander ELL | 10 | 50.0 | | 10.0% | 10.0% | 0.0% | 30.0% | 0.0% |
| Pacific Islander Non-ELL | 59 | 83.1% | -7.1 | 5.1% | 3.4% | 0.0% | 8.5% | 0.0% |
| White ELL | 488 | 74.6% | +1.2 | 10.7% | 3.9% | 0.0% | 10.9% | 0.0% |
| White Non-ELL | 47,519 | 92.8% | +0.7 | 3.3% | 0.4% | 0.7% | 2.9% | 0.0% |

Table 9. Graduation Results for Non-Mobile and Mobile Students⁶

| High Schools Attended | 2017 Cohort # | Graduates | | Non-Graduates | | | | |
|-----------------------|---------------|-------------|----------------------|-----------------|--------------------|-----------|-------------|----------|
| | | 4-Year Rate | Difference from 2016 | Still in School | Non-Grad Completer | HS Equiv. | Dropped Out | Expelled |
| One School | 53,766 | 91.4% | +0.1 | 3.4% | 1.1% | 0.5% | 3.7% | 0.0% |
| Two Schools | 16,219 | 83.4% | +2.3 | 7.3% | 1.2% | 1.2% | 7.0% | 0.0% |
| Three Schools | 2,639 | 64.5% | +2.8 | 17.6% | 1.9% | 2.3% | 13.7% | 0.1% |
| Four or More Schools | 625 | 44.6% | +5.5 | 21.9% | 3.7% | 3.7% | 21.9% | 0.0% |

⁶ Mobility refers to the number of different high schools that the student attended within the Commonwealth. Students who never moved or moved in from another state or a private school and attended one public high school in Massachusetts are represented in the “One School” row.

Table 10. Competency Determination (CD) Status for Select Non-Graduate Groups

| | Still in School | | | Dropped Out ⁷ | | |
|--------------------------|-----------------|-------|-------|--------------------------|-------|-------|
| | Number | CD | No CD | Number | CD | No CD |
| All Students | 3,625 | 58.4% | 41.6% | 2,020 | 60.5% | 39.5% |
| Female | 1,294 | 58.0% | 42.0% | 829 | 60.4% | 39.6% |
| Male | 2,327 | 58.7% | 41.3% | 1,191 | 60.5% | 39.5% |
| English Language Learner | 753 | 48.5% | 51.5% | 275 | 26.5% | 73.5% |
| Econ Dis. | 2,849 | 55.1% | 44.9% | 1,561 | 57.8% | 42.2% |
| Students w/ Disabilities | 2,045 | 45.9% | 54.1% | 687 | 51.7% | 48.3% |
| High Needs | 3,381 | 56.0% | 44.0% | 1,730 | 57.7% | 42.3% |
| African American | 658 | 60.3% | 39.7% | 232 | 44.4% | 55.6% |
| Asian | 139 | 59.0% | 41.0% | 41 | 63.4% | 36.6% |
| Hispanic | 1,098 | 52.4% | 47.6% | 599 | 43.4% | 56.6% |
| Multi-race, Non-Hisp. | 106 | 71.7% | 28.3% | 62 | 66.1% | 33.9% |
| Native American | 14 | 64.3% | 35.7% | 6 | 66.7% | 33.3% |
| Pacific Islander | 4 | | | 1 | | |
| White | 1,606 | 60.8% | 39.2% | 1,079 | 73.0% | 27.0% |

Table 11. Distribution of Graduation Rates in the Aggregate for Districts⁸

| 2017 Four-Year Graduation Rate | Number of Districts | Percentage of Districts |
|--------------------------------|---------------------|-------------------------|
| < 50% | 7 | 2.3% |
| 50 - <60% | 2 | 0.7% |
| 60 - <70% | 3 | 1.0% |
| 70 - <80% | 25 | 8.3% |
| 80 - <85% | 25 | 8.3% |
| 85 - <90% | 39 | 13.0% |
| 90 - <95% | 75 | 25.0% |
| 95 – 100% | 124 | 41.3% |
| Total | 300 | 100.0% |

⁷ Only includes still enrolled students and cohort dropouts that attempted the 10th grade ELA and Mathematics test at least once. This represents a change from previous reports where all dropouts regardless of test status were included in the analysis.

⁸ Includes districts with at least six students in the cohort. District analyses include charter schools, regional school districts and vocational/technical high schools.

Table 12. Distribution of Graduation Rates in the Aggregate for Schools⁹

| 2017 Four-Year Graduation Rate | Number of Schools | Percentage of Schools |
|---------------------------------------|--------------------------|------------------------------|
| < 50% | 38 | 9.7% |
| 50 - <60% | 13 | 3.3% |
| 60 - <70% | 10 | 2.6% |
| 70 - <80% | 27 | 6.9% |
| 80 - <85% | 27 | 6.9% |
| 85 - <90% | 45 | 11.5% |
| 90 - <95% | 85 | 21.7% |
| 95 – 100% | 147 | 37.5% |
| Total | 392 | 100.0% |

⁹ Includes schools with at least six students in the cohort